

THE macdonald JOURNAL

APRIL 1971

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THE MACDONALD LASSIE

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Journal Jottings

If only I were about 20 years
younger. If only I had a scientific
inclination rather than a vague inclination
toward the arts. If all the "ifs"
were fact, I'd be banging on the
Registrar's door begging to sign on
the dotted line for what I'd like to
do, if I may borrow an expression
from the now generation, a "with
a" degree in either Agriculture or
Food Science. That's a lot of ifs
or what is considered to be one
of the most up-to-date curriculums
to be offered on any Canadian
campus, but I have a few more.

If you are about to enter the uni-
versity level of education and feel
genuine concern for the environ-
ment and want to do more than
just mouth the words ecology and
pollution and buy liquid refresh-
ments in returnable bottles, then
study this month's lead article and
think seriously about the 130

courses that are available on the
Macdonald Campus. Do a little
extracurricular reading right now.
If you're spending your summers
working and your evenings baby-
sitting to put yourself through
college, then I sincerely believe it
will be money well spent on not
only a college education but an
investment in your future.

If, on the other hand, you're a parent
or rich uncle that's footing the bill,
then I suggest you read both the
editorial and lead article and talk
it over with your prospective
student. Frankly some of the titles
frighten me — they should, I have
to make sure they're spelled cor-
rectly — but they won't frighten
today's science-oriented student.

It is all part of their jargon — a
necessary vocabulary to deal with
today's problems, tomorrow. And
if you are an interfering mother-in-
law or a slightly eccentric aunt, then
nag a little. Your family expects it
anyway and if you don't, and they
know you have read the piece, they
might suspect there's something
amiss. Consider it your contribution
to women's lib.

I'm extremely impressed with what
is being offered on this Campus.
Why? Because I think it takes
most of the "ifs" out of the future.
With a degree in either the many
courses Macdonald has always
offered or one based on the restruc-
tured curriculum for 1970-71, Mac
graduates will be well prepared
to cope with the problems encoun-
tered by our land and its people.
Terrific!

Hazel M. Clarke

Almost a year ago, in an article entitled, "The Crisis In Our Environment," the Journal reported on developments leading to a re-structured curriculum for the Macdonald Campus of McGill University. Those developments are now becoming reality as the Faculty of Agriculture expands its offerings to include those dealing with the conservation of our environments. You can read all about the expanded program of the Faculty in the following pages. Rather than describe the courses, the programs, or the specific learning experiences, it was felt that a listing of all courses was the best way of giving you an idea of the expanded role of the Faculty of Agriculture.

From time to time most schools and universities review their curricula and make adjustments to reflect the changing needs of society. The changes that have been approved for the Faculty of Agriculture are the most significant in the history of Macdonald.

It is realized, however, that the production of food and fibre is still a basic need of society and that any expansion at Macdonald would have to complement the teaching, research and extension activities already associated with agriculture and food science. Because of this the basic offerings in agriculture and food science will be continued in a new, improved form. A student will still be able to specialize in one of six major programs: — Agricultural Engineering, Soil Science, Plant

Science, Animal Science, Economics and General Agricultural Science. In addition, though, students can specialize in the following major fields of study: — General biology, botanical sciences, zoological sciences, microbiology, environmental biology, wildlife resources, environmental conservation, public service and administration, resource economics management, community resource development, agricultural land planning and development, food technology, food management, nutrition, sanitation management and consumer education.

With the introduction of collegial education in Quebec, the number of university years to a first degree are reduced to three. This will mean that students can enter directly into their chosen field of study as soon as they arrive at university. The amount of space released by this change will also mean that more students can be accommodated in the regular university program. It should also be pointed out that the Diploma in Agriculture program at Macdonald will continue to be offered as a two-year course for those intending to become involved in the more applied aspects of agriculture.

For the community, this new orientation of the Faculty of Agriculture

will mean a chance to resolve some of the dilemmas that society has caused in this age of technology. For the staff at Macdonald, the new course offerings will present the challenge of providing the best university level education possible to a group of young people whose concerns range from developing hybrid wheats to developing fish and game management policy. This new thrust will also result in research programs aimed at solving some of the man-made problems of conserving a healthy environment.

Since Canada's economy has such an important base in primary resources, it is fitting that a Canadian institution should be a world leader in developing educational and research programs in renewable resources. It is especially fitting that the Faculty of Agriculture, sitting as it is in the most populated region of Canada, can change so quickly to serve the needs of the modern community.

These new concerns are the types of issues that Sir William Macdonald would have been concerned with 60 years ago. As holders of his trust, we must be sure that those important things are done that he would have wanted. As such, the next 10 years in McGill's Faculty of Agriculture should be exciting ones, as a new vision is built on the firm foundation of nearly three-quarters of a century of excellence in the teaching of agriculture and food sciences.

Mark W. Waldron.

RESTRUCTURED CURRICULUM

Effective September 1971, the entire B.Sc. (Agr.) and B.Sc. (F. Sc.) program on the Macdonald Campus of McGill University has been restructured to meet the changing demands for graduates in the fields of agriculture, food, and the environmental sciences.

In the B.Sc. program, the present 4 options are regrouped into six major areas of study. These are Agricultural Engineering, Agricultural Economics, Animal Science, General Agricultural Science, Plant Science and Soil Science. The two additional areas, Biological Sciences and Renewable Resource Development, are detailed below.

In the B.Sc. (F. Sc.) program, the major areas of Food Technology and Food and Consumer Sciences will complement Dietetics and are given in the outline below.

BIOLOGICAL SCIENCES

Core Courses

Biochemistry I
Cellular Physiology
Biometrics
Biology of Organisms I
Biology of Organisms II
Environmental Biology

General Biology Required Courses

Seminar

Electives

Courses to be chosen as electives in consultation with advisor to a minimum of 30 courses.

Botanical Sciences Required Courses

Microbial World
Histological Methods
Systematic Botany
Genetics I
Plant Anatomy
Biological Instrumentation
Seminar
Project

Primary Electives

Microbial Ecology
Biothermodynamics
Plant Physiology
Mycology I and II
Genetics II
Economic Botany
Plant Ecology
General Plant Pathology
Plant Morphology
Plant Pathology II and III

Free Electives

Remaining courses to be chosen as electives in consultation with advisor to a minimum of 30 courses.

Zoological Sciences Required Courses

Genetics I
Laboratory Techniques in Zoology
Project
Seminar

Electives

Physical Chem. I
Invertebrate Zoology
Genetics II
Statistics
Biothermodynamics
The Physical Environment
General Entomology
Freshwater Biology I and II
Parasitology I and II

Invertebrate Physiology I and II
Principles of Systematic Zoology
Acarology
Natural History of the Vertebrates,
Animal Distribution (Zoogeography)
Vertebrate Morphology
Systematic Entomology
Conservation Biology
Animal Physiology
Reproductive Physiology
Terrestrial Animal Ecology I
Arachnida and Misc. Arthropods
Wildlife Ecology I and II
Insect Morphology I and II
Economic Entomology I and II
Animal Behaviour
Cytology
Computer Math. I
Soil Zoology
Terrestrial Animal Ecology II
Cytogenetics
Animal Mechanics
Biometeorology

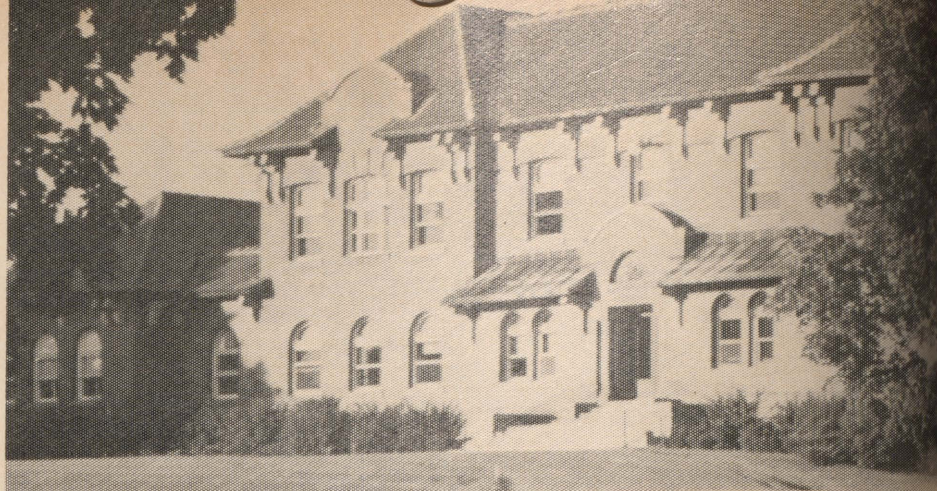
Fourteen electives to be chosen from this list. (At least 10 given by Biology Depts.) Remaining free electives to be chosen in consultation with advisor to a minimum of 30 courses.

Microbiology Required Courses

Microbial World
Microbial Ecology
Physiology of Microorganisms
Biological Instrumentation
Frontiers in Microbiology
Project
Seminar

Two of:
Virology
Mycology
Immunology
Pathogenic Microbiology and
Epidemiology
Food Microbiology
Microbial Genetics

STEPPING STONES



Electives

In addition to 6 core courses, and 9 specialist courses, 15 electives to be selected in consultation with advisor.

Environmental Biology Required Courses

Renewable Resources
The Physical Environment
Seminar
Project

Primary Electives

Microbial Ecology
Terrestrial Animal Ecology I
Fresh Water Biology I and II
Soil Zoology
Plant Ecology
Wildlife Ecology I
Wildlife Ecology II
Biometeorology
Statistics
Genetics I
General Soil Science
Systematic Botany
Applied Hydrology

Twelve courses to be chosen from primary electives; at least 2 must be chosen from Microbial Ecology, Terrestrial Animal Ecology I, or Plant Ecology.

Secondary Electives

Microbial World
Principles of Plant Science
Conservation Biology
Woodlot Forestry
Principles of Economics
Mycology
Biothermodynamics
Parasitology I and II

Plant Pathology
General Entomology
Economic Entomology II
Reproductive Physiology
Animal Physiology
Animal Waste Management
Food Chemistry I and II
Analytical Chemistry I and II
Soil Chemistry and Fertility
Physical and Mechanical Properties of Soils
Invertebrate Zoology
History and Philosophy of Resource Development
Information Storage and Retrieval
Soil Geography
Elements of Physical Geography
Sociology
Animal Behaviour

The student will elect 8 — 11 courses from this list or from other courses to give a minimum of 30 courses.

RENEWABLE RESOURCES DEVELOPMENT

Core Courses

History and Philosophy of Resource Development
Principles of Economics
Economics of Resources Development
Introduction to Sociology
Communications — Extension
Methods
Biometrics
The Physical Environment
Renewable Resources
Environmental Biology
Field Projects

Wildlife Resources Primary Electives

Eight of:

Vertebrate Morphology
Natural History of the Vertebrates
Principles of Systematic Zoology
Parasitology I and II
Wildlife Ecology I
Wildlife Ecology II
Genetics I
Genetics II
Heredity, Evolution and Society
Plant Ecology
Systematic Botany
Invertebrate Zoology
Animal Breeding Principles
Animal Physiology
Fundamentals of Nutrition I and II
Reproductive Physiology
Animal Production, Non-ruminant
Animal Production, Ruminant
Terrestrial Animal Ecology I
Terrestrial Animal Ecology II
Conservation Biology

Secondary Electives

Not less than 6 related courses from any one area of specialization within renewable resources development which may or may not be within primary area of interest.

Free Electives

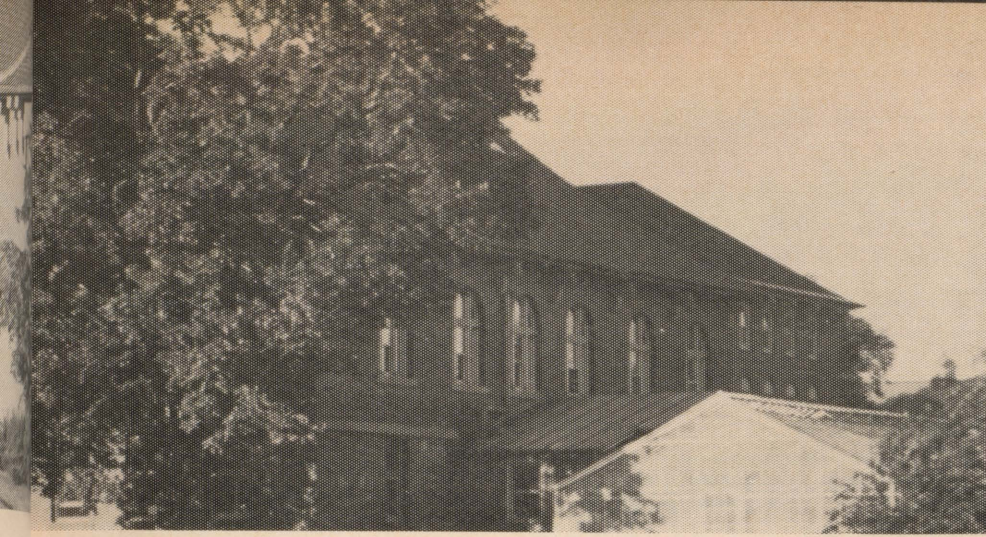
Remaining courses to be chosen from any approved courses to a minimum of 30 courses.

Environmental Conservation Primary Electives

Not less than 8 courses:

Biochem. I
Inorganic Chem. I
Analytical Chem. I
Food Chem. I and II
Biothermodynamics

TO THE FUTURE



Wildlife Biol. I
Animal Waste Management
Atmospheric Physics
General Soil Science
Physical and Mechanical Properties
of Soils
Soil Chem. and Fertility
Soil Microbiology
Geomorphology
Soil Zoology
Applied Hydrology
Economic Entomology II
Field Management
Conservation Biology
Fresh Water Biol. I
Fresh Water Biol. II
Microbial World
Microbial Ecology
Photogrammetry and Air
Photointerpretation I
Physics and Biological Aspects
of Pollution

Secondary Electives

Not less than 6 related courses to be chosen from any one area of specialization within renewable resources development which may or may not be in primary area of specialization.

Free Electives

Not less than 6 courses to be chosen from any approved courses.

Public Service and Administration

Primary Electives

Equivalent of 8 courses:
Economics (Micro and Macro)
Digital Computers
Mathematical Statistics and/or
Economic Statistics
Management (of Enterprise)

Land and Resource Appraisal
Political and Economic Aspects
of Resource Problems (Seminar)
Political Science (Comparative
Government)
Economics (Public Finance)
Constitutional Law

Secondary Electives

Equivalent of not less than
6 courses:
Economics — Canadian Econ.
Policy
Economics — Labour
Economics — Government and
Business
Economics — Investment Analysis
and Company Finance
Economics — Industrial Relations
Management — Organization
Management — Principles
Management — Decisions
Management — Problems in
Corp. Policy
Geography — World Economic
Geography
Geography — Economic Geography
Political Science — Government
and Politics of the United States
Political Science — Public
Administration
Political Science — International
Relations
Political Science — Government of
Canada
Political Science — French
Canadian Politics

Free Electives

Electives to be chosen to a
minimum of 30 courses.

Resource Economics and Management

Primary Electives

Equivalent of 8 courses:
Economics — Intermediate
Micro and Macro
Digital Computers
Mathematical Statistics and/or
Economic Statistics
Land and Resource Appraisal
Political and Economic Aspects of
Resource Problems (Seminar)
Commercial Law
Management — Organization
Management — Decisions
Economics

Secondary Electives

Equivalent of not less than
6 courses:
Economics — Decision Making
Economics — Money and Banking
Economics — International Trade
and Finance
Economics — Transportation
Economics — Labour
Economics — Marketing
Economics — Econometrics
Management — Principles
Management — Decisions
Management — Problems in
Corporate Policy
Accounting Elements
Financial Accounting
Management Accounting
Political Science — Public
Administration
Political Science — Government
of Canada

Free Electives

Electives to be chosen to a
minimum of 30 courses.

Community Resource Development

Primary Electives

Not less than 8 courses:

General Soil Science
General Plant Science
General Animal Science
Rural Sociology
Modern Urban Community
Social and Institutional Processes
The Process of Development
Field Techniques
Seminar and Special Projects
Research Methods (Community Survey)
Studies in Mass Media
Computer Math. I

Secondary Electives

Not less than 6 related courses to be chosen from any one area of specialization which may or may not be in primary area of specialization.

Free Electives

Not less than 6 courses to be chosen in consultation with advisor.

Agricultural Land Planning and Development

Required Courses

General Soil Science
Soil Survey
Geology and Geomorphology
Soil Geography

Primary Electives

At least 6 courses:

Biology of Organisms I
Biology of Organisms II
Physical and Mechanical Properties of Soils
Soil Chemistry and Fertility

Physical and Biological Aspects of Pollution

Pleistocene Geology

Photogrammetry and Air

Photointerpretation I

Computer Math. I

Animal Waste Management

Biometeorology

Conservation Biology

Plant Ecology

Economic Analysis

Economics of Marketing

Landscape Architecture

Woodlot Forestry

Terrestrial Animal Ecology

Engineering for Land Development

Surveying

Applied Hydrology

Free Electives

Any related course within the university approved by the advisor, to a minimum of 30 courses.

FOOD TECHNOLOGY

Required Courses

Analytical Chemistry I

Analytical Chemistry II

Organic Chemistry I (if not taken at CEGEP)

Physical Chemistry I

Biochemistry I

Food Chemistry I and II

Fundamentals of Nutrition I and II

Microbial World

Food Microbiology

Biometrics

Computer Math. I

Commercial Law

Unit Operation in Food Processing

Food Engineering

Speech and Technical Writing I and/or II (Bilingual)

Economics

Electives

GROUP A (Select a minimum of 6)
Organic Chemistry II

Biothermodynamics

Product Development

Food Standards I and II

Institution Administration

(Organization and Management)

Institution Administration (Personnel Management)

Animal Products

Post-Harvest Physiology of Horticultural Crops

Animal Waste Management

GROUP B (Select a minimum of 6)

Biology of Organisms I and II

Virology

Parasitology I

Entomology — General or Economic Entomology II

Plant Pathology I (General)

Plant Physiology

Animal Physiology

Disease Control

Pathogenic Bacteriology & Epidemiology

Institution Administration (Food Facility Layout)

Food Chemistry I and II

Institution Administration (Food Production)

Industrial Microbiology

Management I and II (Business and Industrial Psychology)

Management III and IV (Introduction to Marketing Management)

Management V and VI (Accounting Manager-Management Approach)

Mechanics I

Graphics

Elementary Differential Equations

Heat Transfer

Physical Properties of Biological Materials

Fluid Mechanics

Economics (Statistics)

Languages

Psychology

Sociology (Introductory)

Research Methods for Social Studies

Communicating Arts

Applied Human Nutrition

Cellular Physiology

FOOD AND CONSUMER SCIENCES

Core Courses

Biochemistry I
Cellular Physiology
Biometrics
Biology of Organisms I
Microbial World
Project and/or Seminar

Required Courses for Different Areas of Specialization

Food Management

Principles of Economics
Institution Administration (Personnel Management)
Management I and II (Business and Industrial Psychology)
Institution Administration (Food Production)
Food Standards I

Nutrition

Fundamentals of Nutrition I and II
Applied Human Nutrition
Diet Therapy I
Biochemistry II
Animal Physiology
Metabolic Endocrinology and Gastrointestinal Physiology

Sanitation Management

Environmental Biology
Unit Operation in Food Processing
Food Microbiology
Food Chemistry I and II
Pathogenic Bacteriology and Epidemiology

Consumer Education

Principles of Economics
Consumer Education I
Food Standards I
Textiles I and II
Communication Arts (Educational Principles and Techniques)

Home Economics

Food Standards I or Basic Clothing
Fundamentals of Nutrition I and II
Textiles I
Home Management
Consumer Education I
Family Living

General

Core plus 10 from lists of required courses plus electives to a minimum of 30 courses.

Electives

GROUP A (Select a minimum of 5)
Advanced Foods
Industrial Microbiology
Product Development
Animal Products
Post-Harvest Physiology of Horticultural Crops
Virology
Parasitology I
Entomology
Plant Pathology
Disease Control
Institution Administration (Food Facility and Layout)
Food Engineering
Graphics
Heat Transfer
Physical Properties of Biological Materials

Equipment Design
Food Standards II
Diet Therapy II
Genetics I
Principles of Design
Garment Design I and II
Textiles and Clothing (Tailoring)
Computer Math. I

GROUP B (Select a minimum of 5)
Economics (Marketing)
Economics (Statistics)
Economics (Analysis)
Consumer Education II
Commercial Law
Management III and IV (Introduction to Marketing Management)
Management V and VI (Accounting, Manager-Management Approach)
Institution Administration (Organization and Management)
Institution Administration (Accounting and Cost Control)
Sociology (The Individual and the Family in Society)
Sociology (Social Process & Institutions)
Sociology (Modern Community)
Sociology (Introductory)
Research Methods for Social Studies
Psychology (Introductory)
Psychology (Educational)
Communicating Arts (Principles of Instructional Communication)
Communicating Arts (Group Instruction)
Language and Writing I (Studies in the Mass Media)
Language and Writing II (Literature and Science)
Language and Writing III (Literature and Environment)
Language and Writing IV (Technical & Research Writing)
Municipal Engineering.

Select remainder from all other courses offered.

SNOW MOULDS



Yes, it's true. Some moulds have their own natural anti-freeze and are able to grow at temperatures well below the freezing point of water. Perhaps the most common of these cold-tolerant fungi are the snow moulds: fungi that grow under snow during the winter and early spring. Protected by the snow, they grow on grass, clover, alfalfa and other vegetation in much the same way that blue and green moulds grow on damp clothing, fruits, and vegetables. Like the common moulds, some snow moulds are saprophytes and grow only on dead leaves, stubble, and other dead vegetable matter, but all too many of them are parasites that grow on living plants and cause considerable damage.

Obviously, the most unusual characteristic of the snow moulds is their ability to grow at low temperatures when other plants are dormant. The living matter in their tiny bodies contains an unusual anti-freeze compound that permits them to function normally when the growth of other organisms has been slowed or completely stopped by the cold. Although they can grow under sub-zero conditions, most snow moulds grow best when the temperature is about eight or ten degrees above freezing. None of them function well when the weather is warm enough for grass to begin growing and all snow moulds stop growing during periods of "good-growing-weather" for agricultural plants.

There are a number of other fungi, in addition to the snow moulds,

that have this anti-freeze feature of their protoplasm which allows them to grow under freezing conditions. There is one that can grow on meat that is as cold as eight degrees below freezing. This one causes a black discoloration on the surface of cold storage meat. The damage is only superficial and the affected part can be shaved off, but the market value of the product is reduced. Other farm products, including butter, are liable to deterioration and spotting due to the development of moulds which grow at low temperatures. Many of these cold-hardy fungi, and all snow moulds, can survive temperatures as low as a hundred degrees below zero. So no matter how cold the weather is they may become chilled but never frozen to death.

The best place to see snow moulds is just a few inches in front of a receding snow drift as it melts from a sheltered part of a lawn, early in the spring. Here one can often see what looks very much like a grey-brown cobweb spread over the grass. These delicate web-like structures are the bodies of snow moulds. Because they cannot tolerate the ultra-violet rays nor the warmth from the sun, they soon die and crumble in the grass. Thus they may be seen for only a few hours on sunny spring days. The moulds prepare for this annual exposure to the sun by always leaving some part of their bodies converted into tiny spores and other resistant structures in which they remain dormant throughout the summer, and during the cold dry periods of winter. They are revived by the dampness of a winter "thaw" or by the relatively mild weather of late March or April. Thus the period of their most destructive activity — their best growing period — is in the early spring while there is still some snow on the ground.

Snow mould damage is often conspicuous on well kept lawns and golf greens, where it is seen as dead, brown areas in the otherwise green grass. Similar but usually less obvious damage is done every winter to forage crops and pasture plants by these relatively unknown fungi that live under the snow. Unless the damage is very extensive, as it is some years, it is usually not noticed in mixed stands of grass and clover. This is because some species of snow moulds destroy only certain varieties of grass, such as marion blue grass, but perhaps cannot do much visible damage to brome grass, for example. The destructive

action of these species would be clearly visible on a lawn seeded to blue grass but might go unnoticed in a pasture that was mostly clover and native grasses. On the other hand, several of the dozen or more kinds of snow moulds in Canada can grow on clover, alfalfa and other forage plants where they cause some losses every winter. In fact, much of the so-called "winter kill" of forage crops can be attributed to the action of snow moulds.

In Canada, snow moulds were first identified in Alberta about 20 years ago, but they have since been found, wherever they have been looked for, in all agricultural regions where snow covers the crops for part of the year. In Japan and some of the northern areas of Europe, the term

"snow blight" is used to describe the injury caused by moulds that grow under snow to damage crops, especially winter wheat. In Oregon and other northwestern States pink snow mould and a speckled snow mould are recognized as the most destructive diseases of turf. A speckled kind, and at least three other types have been found in Quebec, but the extent of their damage in this Province has not yet been determined. If you look for them, you may see snow moulds on your lawn this spring and you can make your own estimate of the amount of damage they have done.

Prof. R. H. Estey,
Biologist,
Dept. of Plant Pathology.



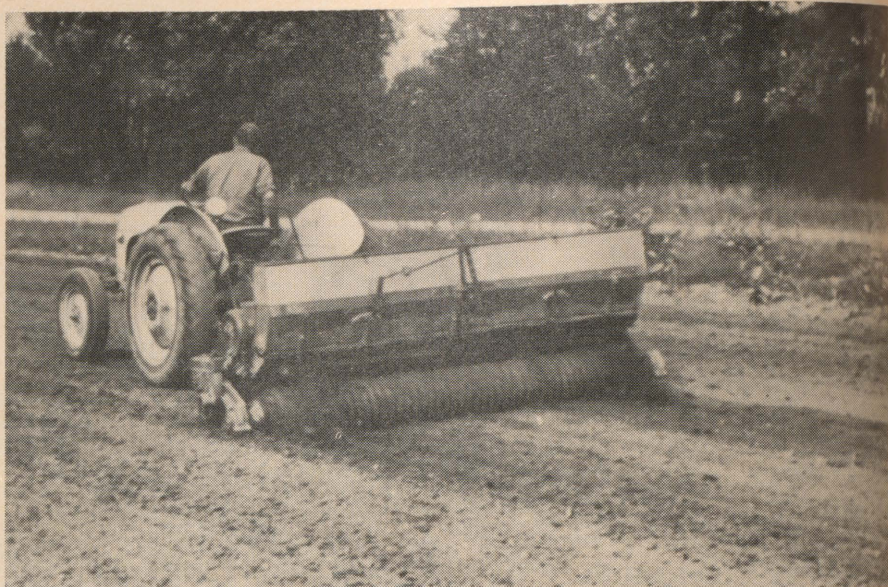
Traditional Seeding Rates - Are They Still Valid?

Some of the recommended seeding rates of our forage species have not changed for decades. In an age of agricultural revolution can we be sure that these rates are still valid? Present day seed costs are high, and recent experiments indicate that we may be using seed rates that are unnecessarily high and, perhaps more to the point, actually detrimental as far as establishment and quality are concerned.

In 1968, we conducted an experiment at Macdonald College using pure stands of timothy and orchardgrass at five different seeding rates. Our highest population (5 lb./acre for timothy, 12 lb./acre for orchardgrass) was close to the recommended seeding rate for each of the species. The other seeding rates were successively lower, the lowest being a fraction of a pound per acre. We were particularly interested in the effect that seeding rate would have upon the weight of the individual plants, as this is one of the main components of yield. At the time, it was thought unlikely that seeding rate would affect the quality of the sward. The results seem to indicate that this is not the case.

The table shows the yields obtained from the various swards on August 31, only 3½ months after seeding. The cut material was separated into living or dead components and the various fractions were dried and weighed. If it is accepted that the presence of standing dead material is undesirable (as its nutritive value is negligible), then a sward with a high proportion of dead material is of lower quality than one with little dead material present.

In both species the highest seeding rates gave the highest total (green + dead) dry matter yield, but a maximum for green (or living) dry matter yield is shown by orchardgrass at lower seeding rates. The weight of dead dry matter is greater for density 32 (3 lb./acre) than for density 8 (¾ lb./acre), so on the basis of quality density



8 would appear to be more desirable. The highest seeding rate in timothy was lost, so no figures for it are available. Although no peak in green dry matter for timothy exists, the ratio of green material to dead material shown in the last column is quite comparable to that of orchardgrass for each of the seeding rates. This ratio could be considered a 'quality index'.

Research indicates that year-old hay and pasture swards rarely contain more than 10-15 plants per square foot, whatever the species. It does not seem logical, therefore, to establish five to 10 times this number in the seeding year only to have the majority die out before or during the first winter. This represents an unnecessary tie-up of plant resources, and prevents proper development of the plants that will ultimately survive.

A good seedbed and good machinery will aid you in establishing the stand you want.

It is apparent from our preliminary experiments that traditional seeding rates may have undesirable effects upon the establishment and quality of the subsequent stands. With most farmers using a chemical weed control program at the time of seeding, high seeding rates to smother weeds should no longer be necessary. Also, any factor affecting forage quality needs close examination. As seed is expensive, should a farmer be seeding 6-8 lb./acre when 2-3 lb. would do? Tradition is not a good enough recommendation in present day farming practice.

Neil Thomas,
Lecturer,
Department of Agronomy.

Material harvested on August 31, 1968

	Density. plants/sq. foot	Green dry matter lb./acre		Dead dry matter lb./acre		Total dry matter lb./acre	Green Dead ratio
Orchardgrass	0.5	2323	+	270	=	2593	8.6:1
	2	4861	+	1016	=	5877	4.8:1
	8	6482	+	1729	=	8211	3.8:1
	32	6482	+	2766	=	9248	2.3:1
	128	6212	+	3457	=	9669	1.8:1
Timothy	0.5	1080	+	119	=	1199	9.1:1
	2	2107	+	238	=	2345	8.9:1
	8	3835	+	864	=	4699	4.4:1
	32	4051	+	2074	=	6125	2.0:1

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture and Colonization

Appointments in the Department of Agriculture and Colonization

The minister of Agriculture and Colonization, Mr. Normand Toupin, has announced recent appointments to important posts in his department:

Mr. J.-Claude Simoneau, formerly assistant director of the Quebec Farm Credit Bureau's loan division, becomes assistant deputy minister.

Mr. Marcel Chevrette, formerly coordinator of the Beauce agricultural region, becomes general director of regional agricultural offices and laboratories.

Dr. Gilles LeBel, formerly assistant director of industrial economy in the department of Industry and Commerce, becomes director of agricultural marketing.

Mr. Jérôme Arcand, formerly coordinator of the Lower St. Lawrence and Gaspé agricultural region, becomes coordinator of special programs.

Mr. Simoneau was born at Black Lake in Megantic county in 1929 and obtained his bachelor's degree in Agriculture from Laval University in 1951. He has also taken courses in valuing and administration and belongs to a number of professional associations.

From 1951 to 1960, he successively held the following positions in the Veteran's Land Act branch: establishment supervisor, credit advisor, and assistant director. In 1961 he was made head of a section in the Quebec Farm Credit Bureau and, in 1967, assistant director of its loan division.

Mr. Chevrette was born in Montreal in April 1917 where he attended elementary and secondary school before going on to the agricultural college at La Pocatière where he took his bachelor's degree in 1940. After holding several posts in enterprises connected with agriculture, Mr. Chevrette spent 15 years in Alberta as a county agricultural representative. Returning to Quebec, he judged farming competitions in the Sherbrooke area and then was appointed assistant manager in the Farm Credit Corporation, a position which he held until he was made coordinator of agricultural region 3 in 1968.

Dr. Lebel was born at Trois-Pistoles in 1932, where he attended elementary school. He obtained his secondary education at the College St-Laurent in Montreal. He was awarded a master's degree in Economics by the University of Montreal in 1956 and a doctorate in the same subject by the University of Paris in 1960. Before returning to Canada, he was attached to the European Coal and Steel community for several months.

After having been named research assistant to the CNR in 1960, he held the post of economist with the Canada Department of Agriculture before becoming assistant director of industrial economy in the Quebec department of Industry and Commerce.

Mr. Arcand was born at Ste-Marie du Cap-de-la-Madeleine in 1925. He attended elementary and secondary school in Cap-de-la-Madeleine. He entered the agri-

cultural college at La Pocatière in 1945 and left with his bachelor's degree in 1949. After holding a number of posts between 1949 and 1962, Mr. Arcand was engaged by the Farm Credit Corporation where he was in charge of loan reviewing.

In 1964, he was appointed agronomist to the agricultural division of the Eastern Quebec Planning Board and in 1968 became special agricultural adviser and coordinator of the Lower St. Lawrence and Gaspé agricultural region.

Farm Credit Bureau's Report

The Quebec Farm Credit Bureau's report for the period January 1, 1969 to March 31, 1970 (an exceptionally long one — 15 months instead of the usual 12) shows that 2,283 loans totalling \$25,441,550 were made to Quebec farmers under the Quebec Farm Credit Act during the Bureau's last fiscal period.

In submitting the report, the Bureau's president, Mr. Hubert Hurtubise, pointed out that, besides having been very busy with its ordinary operations, the Quebec farm credit organization had taken a big step forward by revising its farm legislation, reorganizing its services and bringing its administrative procedures up to date. Mr. Hurtubise said that the steady progress of agriculture during recent decades calls for matching changes by the government and organizations and all concerned.

The report, which was submitted to the minister of Agriculture and Colonization, Mr. Normand Toupin, draws attention to sweeping changes made in the Farm Credit Act during the period, including an increase in the maximum loan obtainable from \$15,000 to \$25,000 and the admission of new classes of borrowers. During the period, the Bureau received 3,237 applications for loans under the act. The average loan disbursed was \$11,444 compared with \$10,319 for 1968.

Under another act which it administers — the Farm Loan Act — the Bureau disbursed \$2,856,820. This act authorizes the Bureau to repay borrowers in Quebec a portion of the interest they pay on mortgage loans from the (federal) Farm Credit Corporation or on loans to veterans.

Under the Act to promote the development of agricultural exploitations, the Bureau undertook commitments totalling \$101,000 in January, February and March 1970, to make farm establishment grants. It actually paid out \$275,800 under the new commitments and for the remainder of those undertaken by the department of Agriculture and Colonization under its old farm establishment assistance policy.

The Bureau's commitments under the heading of farm enlargement grants, plus those of the department of Agriculture and Colonization up to January 1, 1970 in the form of aid for farm consolidation, totalled \$365,750 and disbursements up to March 21, 1970 amounted to \$429,630.

Since this act did not come into force until January 1, 1970, activities under it during the period covered by the report are limited to three months.

The report reveals a considerable increase in loans granted to Quebec farmers by chartered banks, credit unions and "caisses d'établissement" under the Farm Improvement Act, as compared with 1968.

The government's commitments for reimbursement of three per cent interest for the duration of these loans was higher than ever at \$3,012,459 and the amount thus paid in 1969-1970 to borrowers whose payments were not in arrears exceed \$2 million for the first time since the act has been in effect.

Quebec Makes Big Sale of Broiler Chicken to Japan

The minister of Agriculture and Colonization, Mr. Normand Toupin, has announced that Quebec is selling three million pounds of broiler chicken to the Japanese firm of Mitsui. The minister, who was clearly pleased with the important Japanese trading firm's purchase, pointed out that the sale is the first of its kind in Quebec's history and might lead to attractive markets for other Quebec products.

The deal was made as a result of steps taken by the department of Agriculture and Colonization and also thanks to the help of the department of Industry and Commerce and the Federal government.

Mr. Toupin said that the agreement will enable the province's broiler producers to market some of their produce and thus solve the problem caused by its systematic exclusion by some provinces. The agreement was concluded and signed on February 24 in Montreal, with the shipment to Japan to start on March 10. The Mitsui company is established in 105 countries. Its annual turnover amounts to about seven billion dollars.

Postal Referendum on Proposed Joint Hog-Marketing Plan

The province's hog producers are being given the opportunity to decide, through a postal referendum, the fate of a joint plan prepared by the Quebec hog producers' federation and amended by the Quebec Agricultural Marketing Board.

After hearing the views of the different parties concerned and changing certain articles of the plan, the Board drew up a list of about 12,000 market-hog producers who may eventually come under the plan. Hog raisers whose names appear on the Board's official list were to vote for or against the plan by mail.

The plan, which would be administered by the Quebec hog producers' federation, is designed to obtain more profitable hog marketing conditions for Quebec producers. It calls for control of hog production to ensure better quality and meet market requirements and demand, thus avoiding overproduction. It also makes provision for exploring new market possibilities and improving existing ones.



Lightweight, Battery-Operated Respirator for Dusty Farm Jobs

The following information about a respirator for use on dusty farm jobs is published in response to an enquiry from a farmer in Abitibi who said he was suffering from a complaint which occurs in certain parts of Quebec and is caused by breathing dust from grain containing spores.

The equipment illustrated enables a man to work a normal shift in a dust-contaminated atmosphere without endangering his health. Completely self-contained, the Mark II positive pressure powered respirator comprises four units: a power unit incorporating motor, blower and filter and weighing only 3.5 lb (1,6 kg); a 6-V rechargeable silver-zinc battery, also weighing about 3.5 lb (1,6 kg), which will operate the blower continuously for at least eight hours; a choice of chest or back harness; and a triangular face mask with connecting tube or tubes.

Positive pressure protection is safer in dust-contaminated atmospheres than negative pressure equipment since it maintains in the face mask a pressure greater than that of the surrounding air and thus prevents dust and other impurities seeping behind the mask. For added safety, the Mark II incorporates a fail-safe device should the power supply be cut. In this case, provided the filter has been properly maintained and is not completely blocked, the respirator will function like a normal negative pressure device, enabling the operator to complete his task safely if desired.

The electric blower delivers filtered

air to the face mask at up to 4.25 ft³/min (120 litres/min). Positive pressure inside the mask is thus maintained at not more than 0.65 in. (15,5 mm) water gauge and does not normally drop below 0.5 in. (12,7 mm) water gauge when the wearer is inhaling.

A pre-filter prolongs the life of the main filter by removing coarser particles. The main filter is of resin-encapsulated merino wool and is stated to have passed official tests at above 99.8 per cent efficiency.

The triangular face piece leaves the eyes free and thus permits unobstructed vision. The equipment is offered in two versions. The power unit may be mounted on the wearer's back and connected to the base of the mask by two air tubes; alternatively, the power unit may be chest-mounted, as in the illustration, and connected to the mask by a single tube.

The respirator is made by Martindale Electric Company Ltd, Neasden Lane, London N.W. 10, England.

Elm Terrace Farm

The land that Aaron B. Churchill now occupies in Havelock in Huntingdon County was acquired by his ancestors in 1832 and the improvements which have been made to it are the fruit of the work of four generations, including his own. The house and buildings, the big garden where vegetables and small fruits grow in abundance and the trees and flowers —all perfectly arranged and maintained — combine to create an enchanting setting.

The relics of bygone days which add the finishing touch to the scene suggest that the occupants are of British origin and this impression is confirmed by the name and the horseshoe on the door of the house.

Elm Terrace Farm has a total area of 325 acres, including an orchard and a sugar maple bush which are the main sources of income, supplementing that derived from livestock dealing. Mr. Churchill has had to curtail his activities owing to uncertain health and shortage of help and that is why he has given up dairy-farming.

The 40-acre orchard with its 1,500 apple trees is on stony land from which rocks are removed year after year. So far, it has taken 1,000 hours work with a bulldozer to

bury five long stonepiles. Thanks to the care taken of the orchard — spraying, spreading fertilizers, mowing, protecting the trees from being nibbled by rodents, pruning, and replacing old trees — good crops of high-quality fruit are obtained provided weather conditions are suitable. The competitor has an apple-storage and all the equipment needed to operate an orchard.

Equal attention is given to the care and development of the 80-acre maple bush in which 6,000 tappings are made. Modern, well-cared-for equipment enables Mr. Churchill to produce maple syrup and sugar of the superior quality which won him the sixth prize at the Toronto Royal Winter Fair in 1969. The sap is collected by tractor except in the case of 1,000 tappings for

which plastic tubing is used. There are also good sheds for storing sugaring equipment. But there is one fly in the ointment — the animals are allowed into the maple bush, hence the absence of young trees. Being a livestock dealer, Mr. Churchill has a herd which may vary somewhat in size from day to day.

The interior of the house, although very up-to-date as regards modern conveniences, contains a number of pieces of antique furniture and china. The general arrangement of the home is a tribute to Mrs. Churchill's good taste. She is a graduate of Macdonald College and has won several prizes for cooking at the Ormstown Fair. Besides her other responsibilities, she sees that the farm accounts are kept up to date. The Churchill's have one child, Elizabeth.



Dairy Farming — A Good Way of Life

With the help of a hired man, Mr. Allan D. Hammond works the 205-acre farm at Saint Jerusalem which he took over from his father in 1958 and another 125 acres of rented land. The farm plan shows 50 acres of clay soil, 210 of loam, and 30 of light soil.

In general, the crops are based on the needs of the dairy herd, namely: 20 acres of barley, 27 of Garry oats, 24 of silage corn, 15 of grain corn, 154 acres of hay, and 50 in pasture. The pastures are not sufficient for the needs of the cattle, but the shortage is made up by feeding from a rack. In addition, starting around the first of August, the cows are allowed to graze alfalfa aftermath for about an hour a day.

Liming was begun a dozen years ago and is being continued. Twelve tons of commercial fertilizer of three different formulas are also applied each year according to the needs of the crops. Manure is carried out to the grasslands as it accumulates and then spread in the fall. Weeds are controlled with herbicides and by regular summer-fallowing.

As Mr. Hammond points out, it has been hard work bringing the land

under the plow, stones having always been a serious problem. In some places, the long stone piles serve as fences and many rocks have been buried. Generally speaking, the fences are straight and strong. Since the soil is shallow, surface drainage has had to be used.

Almost all of the farm's income comes from the purebred Ayrshire herd of two bulls, 60 milking cows and 26 head of young stock. These cattle and the children's pony make up the livestock. Semen from the Eastern Breeders' Association at Kemptville is used to breed the best cows and the herd replacements come from the herd itself. The last available figures show the average annual milk yield as 8,450 pounds per cow. The herd's B.C.A.'s according to the R.O.P. records were 102 and 97.

Meal for the cattle is made from home-grown grains ground on the farm.

The necessary farming implements are kept in perfect condition and housed in a large machinery shed in the centre of which is a well-equipped repair shop. The farm buildings are also very well maintained and altogether make a

fine-looking group. The impressive L-shaped barn with its French-style roof is completely white-washed inside, has 56 stanchions and eight pens and all the up-to-date conveniences. Two concrete silos are built against the back of the barn. The very clean and well-equipped dairy houses a bulk cooling tank with a capacity of 3,500 pounds, to which the milk is brought by pipeline.

From the sugar bush where 1,000 tappings are made, 110 gallons of maple syrup were sold last year to customers who know where to come to find a good product. The sugar-house with its modern equipment is only a short distance from the highway. The income from this enterprise supplements the returns from the dairy herd.

The square brick house is roomy and admirably arranged. The furniture in the living room was a wedding present to the grandparents; it is in a perfect state of preservation and has a priceless sentimental and, probably, monetary value.

Mrs. Hammond, who holds a teaching certificate in home economics from Macdonald College, finds time to give courses and attend to the many demands made upon her by her family, the upkeep of a large home, and the garden.

QWI

Due to the vast amount of material — some of it rather outdated for the April issue — space limitations have forced us to cut copy. We apologize if your news has been omitted but felt that preference should be given where possible to up-to-date events.

Abitibi East

Val d'Or: A demonstration on beauty products was given. Decided to have a card party to raise funds. Lunch served. At the February meeting heard report of card party. There were 13 tables playing and the sum of \$76 was raised. Now selling tickets to continue raising funds.

Abitibi North

Matagami: A sum of money was given to both the school library and the town library for the purchase of children's books. Mr. Rod Valliere, Chief of Security at Matagami Lake Mine was guest speaker. His topic was "Drugs and Abuse". A film was shown. Roll call was pay your shoe size in pennies. Contest: Find as many different buttons as you can in your home. Prizes were given. Lunch served.

Argenteuil

At Arundel only eight members ventured out in the 32 below zero weather to attend their February meeting and to enjoy the Valentine decorations and refreshments. Roll call was bring a home-made Valentine to be forwarded to the Lachute Residence. Brownsburg: Made donations to the Brownsburg Minor Hockey League and the Grace Dart Hospital in January. In February a fashion show of

jewellery was presented and members made cookies and candy for the Veterans Hospital at Ste. Anne's. In January Dalesville-Louisa members heard a tape of the broadcast on Influence presented by Mrs. G. McGibbon on a Sherbrooke radio station during the Christmas season. At the February meeting grandmothers were entertained with games and refreshments and the roll call was bring a Valentine for a shut-in. Frontier: Mrs. Alan Walker gave a demonstration on making plastic flowers and ornaments. Mrs. Leonard Gaston, a senior member, received a mohair blanket from the Abbie Pritchard Fund. A worthy recipient; Mrs. Gaston is an inspiration to all who know her. Jerusalem-Bethany: January saw one of their members give a demonstration on the making of plastic ornaments and flowers. In February members planned to cater to a wedding. Lachute: In January branch was taken on a very interesting and instructive trip along the River Po by Dr. S. MacKimmie who had been in northern Italy recently and knew the history of that part of the country well. February had a well attended meeting to participate in the auction sale of baked goods and miscellaneous articles. Pioneer: Members enjoyed a casserole supper and had as their roll call an item from the Macdonald Journal. Upper Lachute-East End: Members ventured out in 40 below zero weather for their candy sale. Roll call was Sing Say or Pay.

Bonaventure

Black Cape: One guest and 22 members present. Roll call was name a safety measure. Mrs. Mary

Budd, agent for Avon products, gave a demonstration. New Richmond West: Item read, "Avoid Snowmobiles." Several quizzes were held. Gifts given to sick and shut-ins. Door prize awarded. Port Daniel: Articles brought in for sale.

Brome

Austin: Two hundred dollar bond purchased for Bursary Fund. Heard reports from children's Christmas party, also library. Held an exhibit of antiques — china, glass, silver and books. Cards to be sent to shut-ins. 1971-72 program made up. South Bolton: Plans for program for 1971-72 made. Two new members joined. Get well cards signed.

Compton

Canterbury: Card parties held during January. Christmas Cheer report: 22 baskets of candy made and given to senior citizens at the three rest homes in Bury, box sent to veterans, two shut-ins remembered and a man living alone remembered with a box of food. Sawyerville: Decided to help the cafeteria of the Sawerville School. A supper to be held for this purpose. Guest speaker was the Rev. Frank Ball, who gave a most interesting address on the non-medical use of drugs. Lunch served.

Gaspe

Barachois: Gaspe welcomes a new branch, that of Barachois. The first meeting was held last December, with 24 members joining. Many interesting things were discussed and all members seemed very enthusiastic. They are anxiously waiting for their books. They have

already shown an interest to join the W.I. Fall Fair and are planning an evening in June for the senior citizens of Barachois. Keep up the good work, Barachois! Dartmouth: Reported gifts sent to children in the North. Raised and sent \$25 to the branch of the White Cross at Gaspé to help buy gifts for patients in the Ross Sanitarium at Gaspé. Pennies for Friendship collected. Douglstown: One member given a Life Membership. Collected \$73.95 for the White Cross Drive. Gaspé: Collected 50 cents from each member (\$7) to be sent to CARE. In January guests were present. One, a sister from The Holy Rosary, who had recently visited the Holy Land, gave a very interesting talk and showed films of her trip. Wakeham: The roll call was interesting and informative, as each member had to "dig up" some interesting history of Gaspé. Money sent to Quebec Extension Fund. Money for general funds was raised from the raffle of a cushion made by one member. Fork: Motto was "Life is what you make it." Pot Luck supper held to raise funds for branch. A few extra pennies made by the roll call, which was pay by the size of your shoes. Contests held.

Matineau

Rupert: One member told of her Christmas in Florida and showed pictures and slides she had collected. Attended an open house. New member joined. She was presented with a hand blown vase. Gave \$5 to the Cup of Milk Fund. Asked for knitting and sewing from Save the Children organization. Cards and thank-you notes received from those remembered at Christmas. Wright: Readings given

by Mrs. Emile Lachapelle: "Thanks is the frosting on the cake" and "Years take their toll." Had a health contest and publicity quiz. A touch and take sale was also held.

Megantic

Inverness: Discussed Coats Competition and the Children's School Fair and prepared prize list ready to deliver to the children in the county. Sent a birthday card to a local resident who has been sick. Kinnear's Mills: Discussed the play which Megantic County is to put on at June Convention. Mrs. Victor Lowry read letters from Sherbrooke Hospital regarding their fund raising campaign. Thank-you note read from the matron of the Kinnear's Mills Home for Christmas gifts of flanellette blankets. Catering to a wedding reception discussed. Voted \$5 to Canadian Save the Children Fund. Each member wore a homemade Valentine, the prize for the best going to Mrs. Russel Rothney.

Missisquoi

Cowansville: Enjoyed a "fun" meeting. Recited Valentine verses and played cards. Held a White Elephant sale. Dunham: Celebrated their 60th anniversary. Representatives from other branches attended and gave donations. Fordyce: Articles were brought for the Douglas Hospital. Donated \$10 to the local Calf Club. Stanbridge East: St. Valentine's Day was observed. One was sent to a shut-in. A copy of a resolution was signed in support of a CEGEP for the greater southern Quebec area.

Montcalm

Rawdon: Following are some of the

activities of this branch over the past few months. Farewell gifts presented to two members who moved to Ontario. Scholarship of \$100 presented to a pupil at Rawdon Consolidated School for highest Grade 9 marks. Four new members joined the group. Christmas parcels sent to Eski-Tots, NWT. Many members attended French course given by adult education group of Joliette Regional School. Gave \$100 for clothes to Spera Foundation, a drug addict rehabilitation centre in Rawdon. Basket of food sent to a local family who had been burned out. A group of members became volunteer workers at local Heather Hospital. One member, Miss Welsh, made and raffled a fruit cake with proceeds to the Spera Foundation and some members will do volunteer work — teaching handicrafts to girls living there.

Pontiac

Beechgrove: The roll call was a donation to Cystic Fibrosis Research. A résumé on the illicit use of drugs was given. Mrs. Hugh Hammond gave an excellent reading filled with both wit and wisdom. As the day was stormy, the meeting adjourned early, after which a delicious lunch was served. Clarendon: Observed a minute of silence for a deceased friend of the Institute. Gave \$35 toward purchase of material to make bibs for patients in the Pontiac Community Hospital and the Ade Hospital. Fort Coulonge: Held a bring and buy sale, which was very successful. Two readings given: an editorial in Chatelaine on the brief presented to the Government by the Royal Commission on the Status of Women;

the other was what is a boy and what is a girl? by Alan Beck. Quyon: Held a euchre party and a drawing of lucky ticket on quilt. Miss Ellen Bronson showed pictures and talked most entertainingly about her recent trip to Florida. Wyman: Short discussions were held on the topics "What I would like if I were a shut-in" and "What a pre-school child should be taught in preparation for school." Ideas for shut-ins were crossword puzzles, a book, letters and parcels by mail. A pre-school child should be taught to write his name, dress himself and tie shoe-laces. Two TV programs recommended for pre-school children were Sesame Street and Chez Helene. Members considering ways of raising money for proposed Senior Citizens Home. As 1973 will be the 60th anniversary, it was decided to work on a new cookbook to be completed and on sale by then. A quilt is being made for sale with proceeds for Pontiac Community Hospital. Wyman will be hostesses for the annual county meeting to be held on May 26.

Quebec

Valcartier: The guest speaker was a nurse who spoke on and answered questions concerning medicare. Roll call was tell your weight and what your correct weight should be. A successful euchre party was reported. Letters of thanks read. Donated to Save the Children Fund. Four members visited a shut-in member.

Richmond

Cleveland: The County President, Mrs. Farant was a guest. Games of Pinochio played with prizes. Valen-

tines sent to shut-ins and to Dixville Home. Donation sent to Save the Children Fund. Books sold for Pennies for Friendship. Gore: Discussion on the closing of the McLennan Library. Had a decorated Valentine cake and held a sale of cakes. New member welcomed to the group. Plants made for fair prizes, one for boys 10-14 and one for girls 10-14. Richmond Hill: Held a contest on knitted and crocheted pillows. Valentine gifts sent to sick in neighbourhood. Afghan sold. Plans for quilting at next meeting. Fines for those not making cushions, 50 cents. Money to be used for Welfare and Health. Richmond Young Women — Roll call give a sewing hint. At the close of the meeting a social evening held with husbands as guests. Shipton: This was mostly a business meeting as reports from the nominating committees were read. Pennies for Friendship collected. A donation given for March of Dimes. Articles were brought in for the cancer cupboard — soap, cloths, powder, bed slippers and towels. It was decided to set aside one meeting a year especially for cancer study, but articles will be accepted all year. Spooner Pond: Convener's items were an article on planting pansies; Readings — Another kind of Grandma and Grandpa's hired man; Garments to be labeled with symbols and how to recognize them; Richmond Regional students loan for further education; 24 ways to fight pollution; baby born with heart defects now leading a normal life at five years. A food, candy, and white elephant sale held — proceeds \$52.70. Donated \$10 to county for hot lunches for school children. Brought in quilt block. One was picked for future use and

the others to be made into quilt. Melbourne Ridge: Motto was Let us endeavour so to live that when we come to die, even the undertaker will be sorry. The roll call was bring decorated cupcakes for Valentines to send to the Wales Home. Thank-you notes received from the sick and shut-ins and from Sherbrooke Hospital. A reading was given entitled, "Measles vaccination questioned." Also a comical reading, "How to talk to baby." Pennies for Friendship collected and annual reports handed out. A donation of \$10 sent to Melbourne Ridge United Church in memory of Mr. Rothwell Beers.

Rouville

Abbotsford: Members read clippings and gave out information on drugs. An interesting and amusing contest was guessing the number of pennies collected during the year for A.C.W.W. Mrs. D. Fisk was the winner.

Shefford

Waterloo-Warden: Roll call was how to improve house plants. Articles read: Poultry egg brief opposes Bill C-176; Remember the good old days; Car salesmen and garages; U.N. leadership convention in June. Donated \$10 to Save the Children Fund. Scrapbooks brought in for hospital. Care parcel raffled. Bingo was played with prizes.

Sherbrooke

Ascot: Mrs. Lorne Butler read a tribute to the late George Ross of Lost River Ranch, Manyberries, Alta. The roll call was a stamped Get Well card for use of Social Convener. Brompton Road: Outline of

Publicity was read. Used stamps were brought in and Pennies for Friendship collected. Drawing for monthly prize held. As a roll call members read a poem composed by themselves or paid a fine of 5 cents, which resulted in much laughter and a few fines. Lennoxville: Mrs. Margaret Lockwood, teacher from the Elementary School spoke about the development of the child from baby to elementary level in this modern world. There was a short discussion on pollution. A good was requested from members, in aid of the Parks Commission, for a dinner to encourage parents to take an interest in the recreation of their children. Mrs. Francis Taylor, past National Secretary for W.I.C. and member of the National Committee for Northern Canada, was guest at the January meeting. Milby: Sock money brought in. Ten dollars given to Hot Lunch Fund at Lennoxville Elementary School. Sugar on snow was enjoyed at Mrs. Eugene Taylor's.

Stanstead

Hatley presented a membership pin to Mrs. H. C. Denton. Projects: the special exhibit at the Ayer's Cliff Fair, in which the W. I. branches and the Cercles des fermieres compete, was adopted as a project by Ayer's Cliff and Hatley. The various articles required were assigned to different members, who agreed to have them ready in time for the fair in August. Hatley sponsored a showing of pictures by Mr. and Mrs. C. Ackhurst as a money-making project. Hatley had demonstration on making braided rugs. Donations: Hatley Centre held a shower of jams and jellies for a home for the elderly newly

established in the community. Stanstead North acknowledged with gratitude special contributions for Christmas gifts from Mr. A. Butters, and Mrs. Frank Stanton, a former member now living in Florida, as well as a 50-cent contribution from each member. This branch gave \$25 toward hot lunches for needy children at Sunnyside School. Hatley gave a donation for records to the Dixville Home for retarded children, and sent scrapbooks and gifts to the Maplemount Home. Guest speakers: Publicity was the subject of talks at two branches. At Beebe Mrs. George Hatch, who reports the news of the border communities for the Sherbrooke Record, the Stanstead Journal, and the Newport (Vt.) paper, spoke on her experiences in news-gathering and reporting. She explained that newspapers have their budget and space limitations, and cannot always publish news as soon and as fully as they might wish, but that she had always found them very willing to cooperate. Mrs. Hatch is a member of the Stanstead North branch, and a past County President. At Hatley Centre the Publicity Convener spoke on the importance of each member creating a good image of the W.I. in her community. At Ayer's Cliff a letter was read from a teacher-consultant stationed in the Keewatin area of Northern Canada. She travels from place to place by plane, covering 15,000 miles in four months. Sources for local history was the subject of a talk given at the Stanstead North branch by Mr. E. J. Struthers, retired Collector of Customs for the port of Rock Island, and an authority on the history of the Eastern Townships. He exhibited old maps and books

and gave a list of 10 books which should form the foundation of any library on local history. "The most interesting and worthwhile meeting of the year," was a roll call which Hatley Centre members found valuable for self-evaluation and future planning. For the first time in its history Stanstead North held its regular meeting in a foreign country. The branch was entertained by its one American member at her home in Derby Line, Vermont, directly across the international border. Roll calls: Ayer's Cliff made suggestions for the 1971-72 program. Beebe members brought Valentine cards for shut-ins; Stanstead North for the Dixville Home. Hatley Centre called for ideas for money-making projects. Donations: Beebe gave money for school lunches for needy children. Beebe and Stanstead North each gave \$5 toward the expenses of the dog sled derby, which was held at the Rock Island — Derby Line border in February. Stanstead North sent scrapbooks to the Sherbrooke Hospital and the Maple Mount Home. Beebe had a demonstration on cake decorating. Programs: Ayer's Cliff enjoyed a musical program. Hatley Centre's Citizenship Convener conducted a quiz on current events from a news sheet supplied by the local school. Projects: Ayer's Cliff plan to send a child to camp. Each member will contribute \$2 toward the expense. Stanstead North appointed two members to revive the village history started some years ago. Money-making projects: Beebe held a food sale and raffle. Hatley sent around a travelling apron. Hatley Centre auctioned gifts brought by each member for Pennies for Friendship. Stanstead North planned a rummage sale.

Q.W.I. News

At January Board meeting held in Montreal Mrs. Westover, 1st. Vice-President of the Q.W.I. presented Mrs. George McGibbon with an F.W.I.C. Life Membership. Mrs. McGibbon is Past President of the Q.W.I. and 4th. Vice-President of the F.W.I.C.

A memorial broadcast in honour of Dr. W. H. Brittain, a good friend of the W.I. whose recent death has saddened members who knew him, was given on February third by Miss Viola Moranville, President of Stanstead County W.I., who speaks every month for the Institute over Station WIKE at Newport, Vermont.

Ideas for Bazaar Articles

Demonstrations on the making of these articles were shown at Dundee Branch, Huntingdon County.

1. A wall plaque made by covering an aluminum plate with plastic doilies and flowers for centre.
2. A dusting brush made by bending a wire coat hanger to the shape of a brush and covering by tying on bits of rug cotton.
3. Crocheted dog for cover for can of cleanser.
4. Toilet tissue slip over cover — doll with wool dress and crocheted cover decorated with flowers with opening on top to pull tissue through.
5. Table centrepiece — candle holder or tumbler placed in a nest of flowers.

Appreciating Our Environment

In this age of speed and turmoil there is a need to develop in the youth of today an ability to find relaxation. What better way than to promote an awareness of nature. How peaceful a walk in the woods! It is especially pleasant on a cloudless day to follow the tracks of a woodland creature through the sparkling snow to its home in a tree or to listen to the cheeping of the chickadees. Or again — in summer what fun for a lad to hunt with his father for the proper willow branch to make a whistle. Another time there might be gum just waiting to be taken from the spruce tree.

In our family an annual walk on Mother's Day always proves rewarding. Everybody arrives home with his or her particular treasures — a bouquet of as many varieties of flowers as possible, a collection of leaves or fool's gold salvaged from the rock pile. Most children enjoy the wonder of planting seeds and watching them develop into full grown plants, even if it is a back-breaking job keeping ahead of the weeds. It is something that they and nature have produced together.

If the weather should prove blustery and unfit for outdoor excursions, it is cozy to settle down with some good nature stories or someone's true experiences of life in the outdoors. Many poems, such as

"Trees" by Joyce Kilmer or Robert Frost's "Stopping by Woods on a Snowy Evening" awaken in us a respect for nature. In order to have a nature to enjoy it is time for each of us to make some effort to protect it. There are numerous small ways in which individuals can help the situation, such as discouraging the wilful killing of animals for the sake of killing alone (many species are becoming scarce), encouraging the protection of nesting places of birds and careful picking of wildflowers to ensure that rare varieties will not disappear, and teaching respect for the property of others.

A good rule to follow is, "Try to find a second use for everything," even though using new is easier

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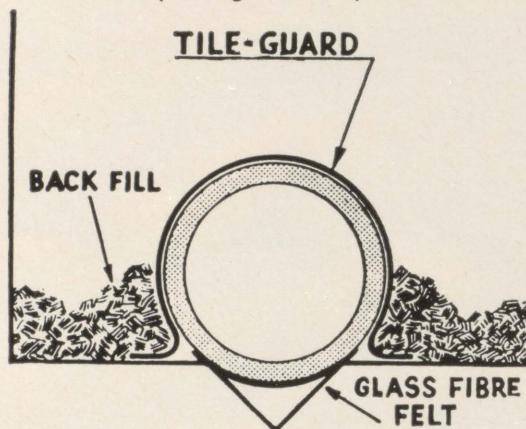
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label carefully, then apply sparingly
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of animals and birds. Try using
the old-fashioned remedies —
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things other than children), salt
ashes for the cabbage worms,

we should consider seriously a thought
expressed by naturalist Aldo
Leopold in 1948, that we should
consider the land as a community
to be used with love and respect,
rather than a commodity to be used
for our material gains only.

S. Sterling (Gwen) Parker,
D. Convener, Agriculture.

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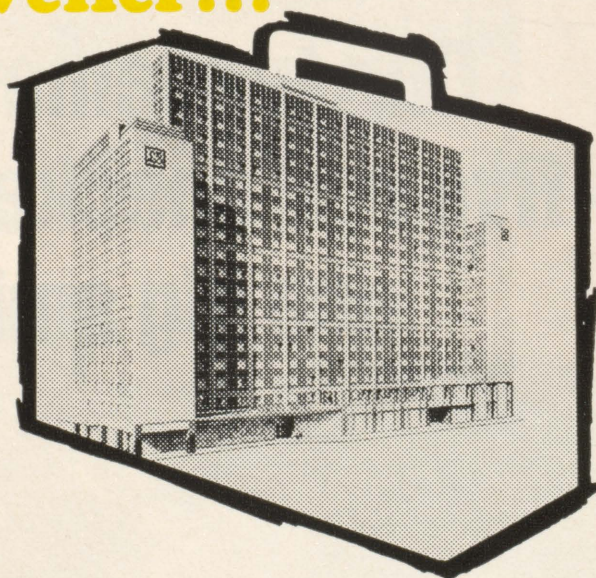
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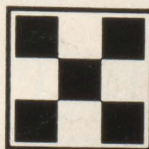
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